

WHAT IS CLAIMED IS:

1. A crosstalk checking method comprising the steps of:
 - extracting a parallel line length between adjacent lines by inputting a layout, and further, inputting a reference value per pitch describing restriction values of parallel line lengths different according to a line pitch; and
 - calculating the line pitch with respect to the adjacent lines extracted in the parallel line length extracting step, comparing the parallel line length between the adjacent lines with the reference value per pitch, and thus, determining a portion at which crosstalk occurs in the case where the parallel line length is greater.
2. A crosstalk checking method comprising the steps of:
 - extracting a parallel line length between adjacent lines by inputting a layout, and further, inputting a reference value per drive capability describing restriction values of parallel line lengths different according to drive capability of a cell for driving a line; and
 - extracting the reference value per drive capability corresponding to the drive capability of the cell for driving the line with respect to the adjacent lines extracted in the parallel line length extracting step, comparing the parallel line length between the adjacent lines with the reference value, and thus, determining a portion at which crosstalk occurs in the case where the parallel line length is greater.
3. A crosstalk checking method comprising the steps of:
 - extracting a parallel line length between adjacent lines by inputting a layout, and further, inputting a reference value describing a restriction value of the parallel line length;
 - tracing a path by using a net list and a point of a

clock source as inputs, so as to extract a clock net; and
classifying the adjacent lines into a line of a
victim which suffers an influence of the crosstalk and a
line of an aggressor which gives the influence of the
5 crosstalk based on the magnitude of an inclination of a
signal waveform at a cell output terminal with respect to
the extracted net by using inclination information
describing the inclination of the signal waveform at the
cell output terminal described in the net list, as inputs,
10 so as to determine whether or not the net is to suffer the
influence of the crosstalk.

4. A crosstalk checking method comprising the steps of:
extracting a parallel line length between adjacent
lines by inputting a layout, and further, inputting a
15 reference value describing a restriction value of the
parallel line length;

inputting the parallel line length, and further,
inputting a delay fluctuation table describing delay
fluctuation fluctuated in the case of the occurrence of the
20 crosstalk according to driving capabilities of cells for
driving the parallel lines, so as to calculate how much
delay fluctuation the parallel line length extracted in the
parallel line length extracting procedure corresponds to;
and

25 outputting the delay fluctuation calculated in the
delay fluctuation calculating step as delay information for
verifying a timing.

5. A crosstalk checking method comprising the steps of:
extracting a parallel line length between adjacent
30 lines by inputting a layout, and further, inputting a
reference value describing a restriction value of the
parallel line length;

inputting a library, in which delay information is

described, and further, inputting a standard master cell having a plurality of drive capabilities, calculating a determining value of the drive capability per drive capability of the master cell based on waveform inclination
5 information of an output signal in the library with respect to a target cell block whose drive capability is unknown, and subsequently, calculating a determining value of the drive capability of the target cell block, so as to determine the drive capability of the target cell block by
10 comparison; and

determining the crosstalk based on the restriction value of the parallel line length corresponding to the drive capability determined in the drive capability determining step with respect to the adjacent lines
15 extracted in the parallel line length extracting step in the case where the adjacent lines are driven by the target cell block.

6. A crosstalk checking method comprising the steps of:
extracting a parallel line length between adjacent
20 lines per hierarchy with respect to a hierarchically designed layout by inputting a layout, and further, inputting a reference value describing a restriction value of a parallel line length;

25 checking a connection relationship between lines across a hierarchy in a net list of each of hierarchies so as to extract boundary information;

calculating the parallel line length across the hierarchy by summing the parallel line lengths extracted per hierarchy with respect to the same net of the adjacent
30 lines across the hierarchy; and

determining a portion at which crosstalk occurs in comparison of the parallel line length across the hierarchy with a predetermined reference value.